

CLAIMS

1. A picture coding method for generating a coded picture signal by repeatedly assigning a predetermined set of picture numbers in 5 coding order to respective pictures included in a moving picture signal and coding the pictures on a picture-by-picture basis, the method comprising:

an adding step of adding a memory management command to a second picture, the memory management command indicating 10 management of a first picture of a predetermined picture number in a memory, the first picture and the second picture being different from each other; and

15 a re-adding step of re-adding the memory management command to a section other than the second picture in the coded picture signal,

wherein the re-adding step includes:

20 a determining substep of determining whether or not the first picture is located immediately previous to the section in coding order, among pictures of the predetermined picture number which are located earlier than the section in the coded picture signal; and

a prohibiting substep of prohibiting the re-addition of the memory management command when it is determined in the determining substep that the first picture is not located immediately previous to the section.

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2. The picture coding method according to Claim 1,

wherein in the determining substep, it is determined whether or not the first picture is located earlier than a reference point in the coded picture signal in coding order, and

30 in the prohibiting substep, the re-addition of the memory management command is prohibited when it is determined in the determining substep that the first picture is located earlier than the

reference point.

3. The picture coding method according to Claim 2,

wherein in the determining substep, an editing point is

5 handled as the reference point, the editing point being a point at
which continuity of the coded picture signal is lost by editing.

4. The picture coding method according to Claim 2,

wherein in the determining substep, a coded picture including

10 information that prompts initialization of the memory is handled as
the reference point.

5. A picture decoding method for decoding a coded picture signal

obtained by coding a moving picture signal on a picture-by-picture

15 basis, using a predetermined set of picture numbers which are
repeatedly assigned to respective pictures in decoding order, the
method comprising:

a determining step of determining whether or not a memory
management command is added to the coded picture signal, the

20 memory management command indicating management of a picture
of a predetermined picture number in a memory;

a selecting step of selecting a picture which is located
immediately previous to the memory management command in

25 decoding order from among pictures of the predetermined picture
number which are located earlier than the memory management
command in the coded picture signal, when it is determined in the
determining step that the memory management command is added;
and

an executing step of executing the management indicated by

30 the memory management command on the picture selected in the
selecting step.

6. The picture decoding method according to Claim 5, further comprising:

 a reference point determining step of determining whether or not a picture to be managed under the memory management command is located earlier than a reference point in the coded picture signal in decoding order, when it is determined in the determining step that the memory management command is added; and

 a management disabling step of disabling the management indicated by the memory management command when it is determined in the reference point determining step that the first picture is located earlier than the reference point.

7. The picture decoding method according to Claim 6,

 wherein in the reference point determining step, an editing point is handled as the reference point, the editing point being a point at which continuity of the coded picture signal is lost by editing.

20 8. The picture decoding method according to Claim 6,

 wherein in the reference point determining step, a coded picture including information that prompts initialization of the memory is handled as the reference point.

25 9. A picture coding apparatus that generates a coded picture signal by repeatedly assigning a predetermined set of picture numbers in coding order to respective pictures included in a moving picture signal and coding the pictures on a picture-by-picture basis, the apparatus comprising:

30 an adding unit operable to add a memory management command to a second picture, the memory management command indicating management of a first picture of a predetermined picture

number in a memory, the first picture and the second picture being different from each other; and

a re-adding unit operable to re-add the memory management command to a section other than the second picture in the coded picture signal,

wherein the re-adding unit includes:

a determining unit operable to determine whether or not the first picture is located immediately previous to the section in coding order, among pictures of the predetermined picture number which are located earlier than the section in the coded picture signal; and

a prohibiting unit operable to prohibit the re-addition of the memory management command when it is determined by the determining unit that the first picture is not located immediately previous to the section.

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10. A picture decoding apparatus that decodes a coded picture signal obtained by coding a moving picture signal on a picture-by-picture basis, using a predetermined set of picture numbers which are repeatedly assigned to respective pictures in decoding order, the apparatus comprising:

a determining unit operable to determine whether or not a memory management command is added to the coded picture signal, the memory management command indicating management of a picture of a predetermined picture number in a memory;

25 a selecting unit operable to select a picture which is located immediately previous to the memory management command in decoding order from among pictures of the predetermined picture number which are located earlier than the memory management command in the coded picture signal, when it is determined by the determining unit that the memory management command is added; and

30 an executing unit operable to execute the management

indicated by the memory management command on the picture selected by the selecting unit.

11. A program for generating a coded picture signal by repeatedly
5 assigning a predetermined set of picture numbers in coding order to
respective pictures included in a moving picture signal and coding
the pictures on a picture-by-picture basis, the program causing a
computer to execute:

an adding step of adding a memory management command to
10 a second picture, the memory management command indicating
management of a first picture of a predetermined picture number in
a memory, the first picture and the second picture being different
from each other; and

15 a re-adding step of re-adding the memory management
command to a section other than the second picture in the coded
picture signal,

wherein in the re-adding step, the program causes the
computer to execute:

20 a determining substep of determining whether or not the first
picture is located immediately previous to the section in coding order,
among pictures of the predetermined picture number which are
located earlier than the section in the coded picture signal; and

25 a prohibiting substep of prohibiting the re-addition of the
memory management command when it is determined in the
determining substep that the first picture is not located immediately
previous to the section.

12. A program for decoding a coded picture signal obtained by
coding a moving picture signal on a picture-by-picture basis, using a
30 predetermined set of picture numbers which are repeatedly
assigned to respective pictures in decoding order, the program
causing a computer to execute:

a determining step of determining whether or not a memory management command is added to the coded picture signal, the memory management command indicating management of a picture of a predetermined picture number in a memory;

- 5 a selecting step of selecting a picture which is located immediately previous to the memory management command in decoding order from among pictures of the predetermined picture number which are located earlier than the memory management command in the coded picture signal, when it is determined in the determining step that the memory management command is added; and
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an executing step of executing the management indicated by the memory management command on the picture selected in the selecting step.